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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,257	07/09/2003	Roland van Gelder	US010201A	9469
7590	12/05/2005		EXAMINER SEVER, ANDREW T	
Corporate Patent Counsel Philips Intellectual Property & Standards P.O. Box 3001 Briarcliff Manor, NY 10510-8001			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,257

Applicant(s)

VAN GELDER ET AL.

Examiner

Andrew T. Sever

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/11/2005, 3/18/2005, 12/17/2004, 8/30/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

2. Claims 1-13 and 16-19 are objected to because of the following informalities: it is not clear whether both an input and output optical path polarizer are required. Appropriate correction is required.

Applicant claims the two polarizers only in the part of the claim that is in the alternative. Applicant's language is not clear as to whether both polarizers are required, or only that polarizer which is in the same path as the low-retardance film. Appropriate correction is required such as introducing the two polarizers in the claim prior to the low-retardance film. For purposes of a prior art examination it will be assumed that both polarizers are required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 5, 6, 12, and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Gandhi et al. (US 2002/0126242.)

Gandhi teaches in figure 8 an apparatus for use in a color video projection display system, the apparatus comprising: at least one panel (6) arranged within the system to receive via an input optical path incident light of one or more designated colors generated from a light source (inherently prior to 1), the panel modulating the incident light of at least one of the colors in accordance with a corresponding applied signal, modulated incident light of the one or more colors being directed within the system from the panel via an output optical path (13) so as to generate a viewable display of the system; and at least one low-retardance film (14 or 15) arranged within one of (i) the input optical path of the system between an input optical path polarizer (4) and the at least one panel and (ii) the output optical path of the system between the at least one panel and an output optical path polarizer (12), so as to increase a contrast ratio of the viewable display.

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With regards to applicant's claim 2:

Modulator 6 is clearly of the reflective type.

With regards to applicant's claim 5:

It is clearly off-axis.

With regards to applicant's claim 6:

The system shown in figure 8 is clearly a single panel system.

With regards to applicant's claim 12:

It is in the output optical path.

With regards to applicant's claims 16 and 17:

Gandhi specifies in paragraph 8 that it is an LCoS a type of liquid crystal display.

With regards to applicant's claim 18:

See above.

With regards to applicant's claim 19:

The method of using the projection display system above is inherent (see MPEP 2112.02.)

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With regards to applicant's claim 20:

See table 1 page 5 that shows the retardance at 20 nanometers, which is less than 30 nanometers.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 3, 4, 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gandhi et al. as applied to claims 1, 2, 5, 6, 12, and 16-20, above, and further in view of Marshall (US 6,262,851.)

As described in more detail above, Gandhi teaches an apparatus for use in a color video projection display system that among other things includes at least one panel for modulating incident light, however Gandhi only teaches the use of reflective panels. However as taught by Marshall in column 1 lines 26-35 the use of transmissive type panels is interchangeable with those of reflective panels requiring minor rearrangement of parts. Accordingly since reflective and transmissive type panels are interchangeable it would have been obvious to one of ordinary skill in the art at the time the invention was made to use transmission type panels in the projection display system of Gandhi. (See *Smith v. Hayashi* 209 USPQ 754 and 759 (Bd of Pat. Inter. 1980). Also see *In re Fout*, 213 USPQ 532 (CCPA 1982).

With regards to applicant's claim 4:

The transmissive system taught by Marshall in figure 3 is on-axis.

With regards to applicant's claim 7:

The combination of Marshall and Gandhi would lead to a single-panel projection display system with a single transmissive panel with an associated low-retardance film associated with it.

With regards to applicant's claim 8:

Marshall teaches in column 2 lines 5-67 that projectors generally come in two varieties, those with a single modulator panel and those with three and both architectures have benefits and disadvantages, with the three panel having the advantages over single modulator varieties which require such devices as a color wheel that have some-what insufficient performance compared to three panel systems. Accordingly it would be obvious to one of ordinary skill in the art at the time the invention was made to use a three-panel system in the projection device of Gandhi.

With regards to applicant's claim 10:

See above with regards to Gandhi.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gandhi in view of Marshall as applied to claims 3, 4, 7, 8, and 10 above, and further in view of Schmidt et al. (US 5,576,854.)

As described in more detail above Gandhi in view of Marshall teaches a three-panel projection system, however Gandhi in view of Marshall does not teach that a low-retardance film is positioned in an input path. Such a positioning is taught by Schmidt which in column 5 lines 20-35 teaches placing additional retardance (low-retardance film) in both the input and output paths from a panel for the purpose of reducing birefringence error and geometrical imperfections. Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to place the

low-retardance film in the input optical path of the system at a point prior to separation of the incident light (by placing it prior to the separation one can use a single input path low-retardance film instead of three or more films causing an increasing in cost and assembly time.)

9. Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Gandhi as applied to claims 1, 2, 5, 6, 12, and 16-20 above, and further in view of Schmidt et al. (US 5,576,854.)

As described in more detail above Gandhi teaches a reflective panel projection system, however Gandhi does not teach that a low-retardance film is positioned in an input path. Such a positioning is taught by Schmidt which in column 5 lines 20-35 teaches placing additional retardance (low-retardance film) in both the input and output paths from a panel for the purpose of reducing birefringence error and geometrical imperfections. Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to place the low-retardance film in the input optical path in order to reduce birefringence and other errors caused by geometrical imperfections of the various optical devices.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gandhi as applied to claims 1, 2, 5, 6, 12, and 16-20 above, and further in view of Takahara et al. (US 5,875,008.)

As described in more detail above, Gandhi teaches an apparatus for use in a color video projection display system, which among other things includes a polarizer and a low-

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retardance film. Gandhi, however does not specifically teach that the low-retardance film is made of diacetate film. Takahara et al. Teaches in column 7 lines 7-14 that phase plates (another name for polarizers and low-retardance devices) can be made of various materials including diacetate film as is claimed in applicant's claim 13. Therefore it would have been obvious to use a diacetate film low-retardance film in the apparatus of Gandhi. (See *Sinclair & Carroll Co. v. Interchemical Corp* 65 USPQ 297 (1945) and *In re Leshin* 125 USPQ 416 (CCPA 1960), MPEP 2144.07.)

Response to Arguments

11. Applicant's arguments with respect to claims 1-13, and 16-20 have been considered but are moot in view of the new ground(s) of rejection.

A new art rejection has been applied and the finality of the previous office actions has been withdrawn. Accordingly claim 20 has also been considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "W B Perkey", with a long horizontal flourish extending to the right.

AS

William Perkey
Primary Examiner